

(New)

(J) ABSTRACT OF THE DISCLOSURE

An alignable, low-profile substrate chuck for processing, one by one, a number of substrate panels, which may be larger than the chuck itself. The substrate chuck is adjustable in x, y and theta while on the movable platform of a stage, and comprises a nested set of rotatable or sliding brackets adjustable in x, y and theta a positionable vacuum diffuser plate mounted within a coplanar apron on the top bracket. The vacuum diffuser plate fits within a relief cut about the periphery of the apron, which, together with a pattern of islands with their tops coplanar to a ledge formed by the relief, provide location and both bottom and peripheral support for the high-flatness vacuum diffuser plate. The vacuum airflow passes through the vacuum diffuser plate, through the pattern around supporting islands and out through a central yaw shaft about which the yaw rotation centers.

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